Optics Communications 89 (1992) 508–515
North-Holland

OPTICS
COMMUNICATIONS

Author Index to Volume 89

Abramski, K.M., see C.J. Shackleton 89 (1992) 423
Agnesi, A. and G.C. Reali, Passive and self-Q-switching of phase-conjugation Nd:YAG laser oscillators 89 (1992) 41
Armani, F., see Q. He 89 (1992) 54
Artoni, M. and J.L. Birman, Detection of optical squeezing and photon statistics in polaritons 89 (1992) 324
Asakura, T., see E.M. Vartiainen 89 (1992) 37
Auguste, T., P. Monot, L.-A. Lompré, G. Mainfray and C. Manus, Defocusing effects of a picosecond terawatt laser pulse in an underdense plasma 89 (1992) 145

Baba, N., see N. Miura 89 (1992) 375
Bak, Y.H., see J.H. Chu 89 (1992) 135
Baker, H.J., see C.J. Shackleton 89 (1992) 423
Baldis, H., see G.J. Tallents 89 (1992) 410
Banfi, G.P., M. Ghigliazza and P. Di Trapani, Bandwidth and beam quality of barium borate parametric oscillator sinchronously pumped by an active passive modelocked Nd:YAG laser 89 (1992) 63
Barnard, E., see P. Vermeulen 89 (1992) 73
Barrett, G.R., A.K. Powell and T.J. Hall, The SU(2) dynamics of DFWM 89 (1992) 447
Basuray, A., see S.K. Sarkar 89 (1992) 153
Beaud, P., see J.Q. Bi 89 (1992) 245
Belenov, E.M., P.G. Kryukov, A.V. Nazarkin and I.P. Prokopovich, Chirped pulse coherent amplification with full extraction of active medium energy 89 (1992) 468
Berger, M. and L. Knöll, Properties of a quantum light amplifier in a high-Q cavity, applied to a nondegenerate parametric oscillator 89 (1992) 343
Bi, J.Q., W. Hodel and H.P. Weber, Self-stabilization of a hybridly mode-locked styryl-9 dye laser using coherent photon seeding 89 (1992) 240
Bi, J.Q., W. Hodel, P. Beaud, J. Schütz, H.P. Weber, M. Proctor, M.A. Dupertuis, D. Martin, F. Morier-Genoud and F.K. Reinhart, Bulk GaAlAs mirror as a saturable absorber for subpicosecond pulse generation around 835 nm 89 (1992) 245
Bigelow, N.P., see P.R. Hemmer 89 (1992) 335
Birman, J.L., see M. Artoni 89 (1992) 324
Biswas, D.J., S.K. Sarkar and A.K. Nayak, Improved performance of an NH_3 laser by temporal shaping of a CO_2 laser pulse 89 (1992) 249
Bjarklev, A., see O. Lumholt 89 (1992) 30
Bowden, M.D., B.W. James, I.S. Falconer, D.H. Dawes, P.A. Krug, J.C. Macfarlane, W. Wright and L.B. Whitbourn, Annular slot array output couplers for submillimetre lasers 89 (1992) 419
Brown, D., see G.J. Tallents 89 (1992) 410

Cagigal, M.P., Evaluation of the autocorrelation function from measurement of factorial moments 89 (1992) 370
Capmany, J., Structure induced crosstalk in fibre-optic lattice point sensor arrays 89 (1992) 33
Chang, C.-C., see H.-F. Yau 89 (1992) 457
Chee, J.K. and J.M. Liu, Compression of cw passively additive-pulse mode-locked Nd:YLF laser pulses 89 (1992) 414
Chen, H., see X. Yue 89 (1992) 59
Chen, Y.M., see R.J. Jeng 89 (1992) 212
Chi, S. and T.-Y. Wang, Steady-state pulse propagation in an amplifying medium embedded in a dispersive and nonlinear Kerr host 89 (1992) 463
Chilla, J.L.A. and O.E. Martinez, Frequency domain phase measurement of ultrashort light pulses. Effect of noise 89 (1992) 434
Chmela, P., On the puzzle of the phase of second-harmonic generation at a self-organized $\chi^{(2)}$ grating in optical fibers 89 (1992) 189
Choi, J.G., see J.H. Chu 89 (1992) 135
Chu, J.H., Y.H. Bak, B.K. Kang, U. Kim, K.W. Oum, J.G. Choi and D.S. Ko, Michelson interferometric detection for optoacoustic spectroscopy 89 (1992) 135
Conner, P., see S. Guha 89 (1992) 107
Cronin-Golomb, M., see W. Królikowski 89 (1992) 88
Cronin-Golomb, M., Whole beam method for photorefractive nonlinear optics 89 (1992) 276
Crosignani, B. and P. Di Porto, Hamiltonian description of optical pulse propagation in unbounded Kerr media 89 (1992) 453
Cutolo, A. and L. Zeni, Improvements to the diagnostics of beam quality in cw and pulsed laser systems 89 (1992) 223

Dändliker, R., see P. Ehbets 89 (1992) 5
Davidson, N., see E. Hasman 89 (1992) 306
Dawes, D.H., see M.D. Bowden 89 (1992) 419
Delacourt, D., see Q. He 89 (1992) 54
De Micheli, M.P., see Q. He 89 (1992) 54
De Valcárcel, G.J., see D.Y. Tang 89 (1992) 47
Di Porto, P., see B. Crosignani 89 (1992) 453
Di Trapani, P., see G.P. Banfi 89 (1992) 63
Dunn, J., see G.J. Tallents 89 (1992) 410
Dupertuis, M.A., see J.Q. Bi 89 (1992) 245

Ehbets, P., H.P. Herzig and R. Dändliker, TIR holography analyzed with coupled wave theory 89 (1992) 5
Eichler, H.J., R. Menzel, R. Sander and B. Smandek, Reflectivity enhancement of stimulated Brillouin scattering liquids by purification 89 (1992) 260
Eichler, H.J., see R. Macdonald 89 (1992) 289
Elston, S.J., see D.J. Webb 89 (1992) 283

Fainberg, B., Laser-induced grating spectroscopy of electron–phonon interaction in metallic and high-temperature superconductors 89 (1992) 403
Falconer, I.S., see M.D. Bowden 89 (1992) 419
Fish, D.A., see A.K. Powell 89 (1992) 68

Florjańczyk, M. and R. Tremblay, Strong coupling in grating-assisted multiwaveguide systems 89 (1992) 385
Frey, R., Suppression of the medium excitation in resonant nonlinear optics 89 (1992) 441
Friesem, A.A., see E. Hasman 89 (1992) 306
Frigerio, J.-M., see J. Rivory 89 (1992) 482

Gao, M.L., see S.H. Zheng 89 (1992) 296
Gavrielides, A., see P. Peterson 89 (1992) 253
Ghigliazza, M., see G.P. Banfi 89 (1992) 63
Gisin, N. and J.P. Pellaux, Polarization mode dispersion: time versus frequency domains 89 (1992) 316
Gluch, E., H. Haidner, P. Kipfer, J.T. Sheridan and N. Streibl, Form birefringence of surface relief gratings and its angular dependence 89 (1992) 173
Goodman, J.W., see H.M. Ozaktas 89 (1992) 178
Grangier, P., Characterization of non ideal quantum non-demolition measurements 89 (1992) 99
Gravey, P., see N. Wolffer 89 (1992) 17
Gravey, Ph., see N. Wolffer 89 (1992) 380
Grezes-Besset, C., see Q. He 89 (1992) 54
Guha, S. and P. Conner, Degenerate four-wave mixing in Kerr media in the presence on nonlinear refraction, pump depletion and linear absorption 89 (1992) 107
Guimarães, L.G. and H.M. Nussenzveig, Theory of Mie resonances and ripple fluctuations 89 (1992) 363

Haidner, H., see E. Gluch 89 (1992) 173
Hall, D.R., see C.J. Shackleton 89 (1992) 423
Hall, T.J., see A.K. Powell 89 (1992) 68
Hall, T.J., see G.R. Barrett 89 (1992) 447
Hasman, E., N. Davidson and A.A. Friesem, Aspheric holographic elements for far IR radiation 89 (1992) 306
He, Q., M.P. De Micheli, D.B. Ostrowsky, E. Lallier, J.P. Pocholle, M. Papuchon, F. Armani, D. Delacourt, C. Grezes-Besset and E. Pelletier, Self-frequency-doubled high Δn proton exchange Nd:$LiNbO_3$ waveguide laser 89 (1992) 54
He, X.H., see H.Y. Zhang 89 (1992) 263
Healey, P., see G.G. Yang 89 (1992) 183
Hemmer, P.R., M.G. Prentiss, M.S. Shahriar and N.P. Bigelow, Optical force on the Raman dark state in two standing waves 89 (1992) 335
Herzig, H.P., see P. Ehbets 89 (1992) 5
Himbert, M., see P. Juncar 89 (1992) 199
Hodel, W., see J.Q. Bi 89 (1992) 240, 245
Huang, G.-F., J.T. Lin, G. Su, R. Jiang and S. Xie, Characterization of the nonlinear crystal meta-nitroaniline (m-NA) 89 (1992) 205

Ilisca, E., Towards a hyperfine measure of noble metals "image" surface states 89 (1992) 399
Izawa, S., see T. Jaaskelainen 89 (1992) 23

Jaaskelainen, T., S. Toyooka, S. Izawa and H. Kadono, Color classification by vector subspace method and its optical implementation using liquid crystal spatial light modulator 89 (1992) 23
Jacoby, J., see G.J. Tallents 89 (1992) 410
Jain, A.K., see R.J. Jeng 89 (1992) 212

James, B.W., see M.D. Bowden 89 (1992) 419
Jeng, R.J., Y.M. Chen, A.K. Jain, S.K. Tripathy and J. Kumar, A new guest–host system: towards stable second-order optical nonlinearity 89 (1992) 212
Jiang, R., see G.-F. Huang 89 (1992) 205
Jones, D.R. and C.E. Little, A compact, high-power, fast start-up manganese bromide laser (λ 534–554 nm, 1.29–1.40 μm) 89 (1992) 80
Juncar, P. and M. Himbert, Reduction of the second-order Doppler broadening in two-photon atomic beam spectroscopy: a proposal 89 (1992) 199

Kadono, H., see T. Jaaskelainen 89 (1992) 23
Kadono, H., see Q. Zhang 89 (1992) 126
Kang, B.K., see J.H. Chu 89 (1992) 135
Karim, M.A., see S.H. Zheng 89 (1992) 296
Kass, T., see P.T. Lang 89 (1992) 233
Kempe, M., U. Stamm and B. Wilhelmi, Spatial and temporal transformation of femtosecond laser pulses by lenses with annular aperture 89 (1992) 119
Key, M.H., see G.J. Tallents 89 (1992) 410
Kim, U., see J.H. Chu 89 (1992) 135
Kipfer, P., see E. Gluch 89 (1992) 173
Knöll, L., see M. Berger 89 (1992) 343
Knowles, M.R.H. and C.E. Webb, Cavity configurations for copper vapour laser pumped titanium sapphire lasers 89 (1992) 493
Ko, D.S., see J.H. Chu 89 (1992) 135
Kodama, R., see G.J. Tallents 89 (1992) 410
Kostov, N.A. and I.M. Uzunov, New kinds of periodical waves in birefringent optical fibers 89 (1992) 389
Kotlyar, V.V. and V.A. Soifer, Rotor spatial filter for analysis and synthesis of coherent fields 89 (1992) 159
Królikowski, W. and M. Cronin-Golomb, Photorefractive wave mixing with finite beams 89 (1992) 88
Krug, P.A., see M.D. Bowden 89 (1992) 419
Kryukov, P.G., see E.M. Belenov 89 (1992) 468
Kumar, J., see R.J. Jeng 89 (1992) 212

Lallier, E., see Q. He 89 (1992) 54
Lang, P.T., W. Schatz, T. Kass, A.D. Semenov and K.F. Renk, Generation of far-infrared laser pulses in CH_3I gas by stimulated Raman scattering resonantly enhanced at fundamental and overtone transitions 89 (1992) 233
Lederer, F., see C. Schmidt-Hattenberger 89 (1992) 473
Lin, J.T., see G.-F. Huang 89 (1992) 205
Lindell, I., see A. Sihvola 89 (1992) 1
Little, C.E., see D.R. Jones 89 (1992) 80
Liu, J.M., see J.K. Chee 89 (1992) 414
Lohmann, A.W., Array illuminators and complexity theory 89 (1992) 167
Lompré, L.-A., see T. Auguste 89 (1992) 145
Lu, X., see X. Yue 89 (1992) 59
Lu, X., S. Wang and L. Ronchi, Focal shift for a gaussian beam by an aperture written in terms of matrix optics 89 (1992) 195
Luis, A. and L.L. Sánchez-Soto, Breaking the standard quantum limit for interferometric measurements

89 (1992) 140

Lumholt, O., M. Øbro, A. Bjarklev, T. Rasmussen, B. Pedersen, J.E. Pedersen, J.H. Povlsen and K. Rottwitt, Optimum placement of filters in 1300 nm Nd-fibre amplifiers 89 (1992) 30

Macdonald, R. and H.J. Eichler, Spontaneous optical pattern formation in a nematic liquid crystal with feedback mirror 89 (1992) 289
Macfarlane, J.C., see M.D. Bowden 89 (1992) 419
Mainfray, G., see T. Auguste 89 (1992) 145
Manus, C., see T. Auguste 89 (1992) 145
Maradudin, A.A., see M. Nieto-Vesperinas 89 (1992) 149
Marchetti, S. and R. Simili, A tail free, efficient, high power, ns CO_2 laser 89 (1992) 429
Marques, C., see J. Rivory 89 (1992) 482
Martin, D., see J.Q. Bi 89 (1992) 245
Martinez, O.E., see J.L.A. Chilla 89 (1992) 434
Maser, J. and G. Schmahl, Coupled-wave description of the diffraction by zone plates with high aspect ratios 89 (1992) 355
Mendez, E.R., see M. Nieto-Vesperinas 89 (1992) 149
Menzel, R., see H.J. Eichler 89 (1992) 260
Michel, T., see M. Nieto-Vesperinas 89 (1992) 149
Minogin, V.G., see M.A. Ol'shaniĭ 89 (1992) 393
Miura, N. and N. Baba, Extended-object reconstruction with sequential use of the iterative blind deconvolution method 89 (1992) 375
Monot, P., see T. Auguste 89 (1992) 145
Morier-Genoud, F., see J.Q. Bi 89 (1992) 245
Muschall, R., see C. Schmidt-Hattenberger 89 (1992) 473
Myakinin, V.A., Observation of the improvement of image quality under active illumination through turbulence 89 (1992) 164

Nasyrov, K.A. and V.N. Snytnikov, The stability of a laser amplifier module with flat electrodes to parasitic oscillation 89 (1992) 229
Nayak, A.K., see D.J. Biswas 89 (1992) 249
Nazarkin, A.V., see E.M. Belenov 89 (1992) 468
Nieto-Vesperinas, M., T. Michel, A.A. Maradudin and E.R. Mendez, Multiple scattering of two light beams from a random rough surface 89 (1992) 149
Nikolov, Z. and B. Pantchev, Homogeneous refracting waveguide lenses – stigmatism and aplanatism 89 (1992) 131
Norreys, P., see G.J. Tallents 89 (1992) 410
Nussenzveig, H.M., see L.G. Guimarães 89 (1992) 363

Øbro, M., see O. Lumholt 89 (1992) 30
O'Key, M.A. and M.R. Osborne, Broadband stimulated Brillouin scattering 89 (1992) 269
Ol'shaniĭ, M.A. and V.G. Minogin, Three-dimensional velocity-selective coherent population trapping of (3+3)-level atom 89 (1992) 393
Osborne, M.R., see M.A. O'Key 89 (1992) 269
Ostrowsky, D.B., see Q. He 89 (1992) 54
Oum, K.W., see J.H. Chu 89 (1992) 135
Ozaktas, H.M. and J.W. Goodman, Organization of information flow in computation for efficient utilization of high information flux communication media 89 (1992) 178

Pantchev, B., see Z. Nikolov 89 (1992) 131
Papuchon, M., see Q. He 89 (1992) 54
Pedersen, B., see O. Lumholt 89 (1992) 30
Pedersen, J.E., see O. Lumholt 89 (1992) 30
Peiponen, K.-E., see E.M. Vartiainen 89 (1992) 37
Pellaux, J.P., see N. Gisin 89 (1992) 316
Pelletier, E., see Q. He 89 (1992) 54
Peterson, P., M.P. Sharma and A. Gavrielides, Laser diode coupled to a single-delay external Kerr cavity 89 (1992) 253
Picoli, G., see N. Wolffer 89 (1992) 17
Pocholle, J.P., see Q. He 89 (1992) 54
Porcar, R., see J.P. Prenel 89 (1992) 12
Povlsen, J.H., see O. Lumholt 89 (1992) 30
Powell, A.K., D.A. Fish and T.J. Hall, Solution to four-wave mixing in the reflection geometry utilising the SU(1,1) group symmetry 89 (1992) 68
Powell, A.K., see G.R. Barrett 89 (1992) 447
Prenel, J.P. and R. Porcar, Selective polarizing coding laser tomography for aerodynamics 89 (1992) 12
Prentiss, M.G., see P.R. Hemmer 89 (1992) 335
Proctor, M., see J.Q. Bi 89 (1992) 245
Prokopovich, I.P., see E.M. Belenov 89 (1992) 468

Rasmussen, T., see O. Lumholt 89 (1992) 30
Reali, G.C., see A. Agnesi 89 (1992) 41
Reinhart, F.K., see J.Q. Bi 89 (1992) 245
Renk, K.F., see P.T. Lang 89 (1992) 233
Rivory, J., J.-M. Frigerio and C. Marques, Characterization of interfacial index gradients by spectroscopic ellipsometry at variable angle of incidence 89 (1992) 482
Roldán, E., see D.Y. Tang 89 (1992) 47
Ronchi, L., see X. Lu 89 (1992) 195
Rottwitt, K., see O. Lumholt 89 (1992) 30
Royer, V., see N. Wolffer 89 (1992) 380

Sánchez-Soto, L.L., see A. Luis 89 (1992) 140
Sander, R., see H.J. Eichler 89 (1992) 260
Sarkar, S.K., A. Basuray and K. Sengupta, A compound interferometer for angle measurement 89 (1992) 153
Sarkar, S.K., see D.J. Biswas 89 (1992) 249
Schatz, W., see P.T. Lang 89 (1992) 233
Schmahl, G., see J. Maser 89 (1992) 355
Schmidt-Hattenberger, C., U. Trutschel, R. Muschall and F. Lederer, Analytical description of the optical field in a circular fibre array with Kerr-law nonlinearity 89 (1992) 473
Schütz, J., see J.Q. Bi 89 (1992) 245
Semenov, A.D., see P.T. Lang 89 (1992) 233
Sengupta, K., see S.K. Sarkar 89 (1992) 153
Shackleton, C.J., K.M. Abramski, H.J. Baker and D.R. Hall, Lateral and transverse mode properties of CO_2 slab waveguide lasers 89 (1992) 423
Shahriar, M.S., see P.R. Hemmer 89 (1992) 335

Shao, Z., see X. Yue 89 (1992) 59
Sharma, M.P., see P. Peterson 89 (1992) 253
Sheridan, J.T., see E. Gluch 89 (1992) 173
Shih, Y.H., see H.Y. Zhang 89 (1992) 263
Sihvola, A. and I. Lindell, Properties of bi-isotropic Fresnel reflection coefficients 89 (1992) 1
Simili, R., see S. Marchetti 89 (1992) 429
Smandek, B., see H.J. Eichler 89 (1992) 260
Snytnikov, V.N., see K.A. Nasyrov 89 (1992) 229
Soifer, V.A., see V.V. Kotlyar 89 (1992) 159
Solymar, L., see D.J. Webb 89 (1992) 283
Song, Y., see X. Yue 89 (1992) 59
Stamm, U., see M. Kempe 89 (1992) 119
Streibl, N., see E. Gluch 89 (1992) 173
Su, G., see G.-F. Huang 89 (1992) 205

Tallents, G.J., M.H. Key, P. Norreys, J. Jacoby, R. Kodama, H. Baldis, J. Dunn and D. Brown, Energy transport in plasmas produced by a high brightness KrF Raman laser 89 (1992) 410
Tang, D.Y., C.O. Weiss, E. Roldán and G.J. de Valcárcel, Deviation from Lorentz-type dynamics of an NH_3 ring laser 89 (1992) 47
Tang, S.H., see H.Y. Zhang 89 (1992) 263
Tong, Y.-P., see H.-F. Yau 89 (1992) 457
Toyooka, S., see T. Jaaskelainen 89 (1992) 23
Toyooka, S., see Q. Zhang 89 (1992) 126
Tremblay, R., see M. Florjańczyk 89 (1992) 385
Tripathy, S.K., see R.J. Jeng 89 (1992) 212
Trutschel, U., see C. Schmidt-Hattenberger 89 (1992) 473

Uzunov, I.M., see N.A. Kostov 89 (1992) 389

Vartiainen, E.M., K.-E. Peiponen and T. Asakura, Maximum entropy model in reflection spectra analysis 89 (1992) 37
Vermeulen, P. and E. Barnard, The least-squares discriminant function 89 (1992) 73
Vieux, V., see N. Wolffer 89 (1992) 17

Wang, N.-C., see H.-F. Yau 89 (1992) 457
Wang, S., see X. Lu 89 (1992) 195
Wang, T.-Y., see S. Chi 89 (1992) 463
Webb, C.E., see M.R.H. Knowles 89 (1992) 493
Webb, D.J., S.J. Elston and L. Solymar, Observations of diffraction and self-diffraction effects during two-wave mixing in a nematic liquid crystal 89 (1992) 283
Weber, H.P., see J.Q. Bi 89 (1992) 240, 245
Weiss, C.O., see D.Y. Tang 89 (1992) 47
Whitbourn, L.B., see M.D. Bowden 89 (1992) 419
Wilhelmi, B., see M. Kempe 89 (1992) 119
Wolffer, N., P. Gravey, G. Picoli and V. Vieux, Double phase conjugate mirror and double colour pumped oscillator using band-edge photorefractivity in InP:Fe 89 (1992) 17
Wolffer, N., Ph. Gravey and V. Royer, Thresholding of two facing double phase conjugate

mirror and semilinear phase conjugate mirror with fanning in BTO 89 (1992) 380
Wright, W., see M.D. Bowden 89 (1992) 419

Xie, S., see G.-F. Huang 89 (1992) 205

Yang, G.G. and P. Healey, Optical quadratic associative memory with translation and scale invariance 89 (1992) 183
Yau, H.-F., Y.-P. Tong, C.-C. Chang and N.-C. Wang, Induced self-pumping phase-conjugation with $BaTiO_3$ 89 (1992) 457
Yue, X., Z. Shao, X. Lu, Y. Song and H. Chen, Studies on the formation of self-pumped phase conjugation in Cu-doped KNSBN crystal 89 (1992) 59

Zeni, L., see A. Cutolo 89 (1992) 223
Zhang, H.Y., X.H. He, Y.H. Shih and S.H. Tang, Two-wave coupling and self-pumped phase conjugation of SBN:Ce at near infrared wavelengths 89 (1992) 263
Zhang, Q., S. Toyooka and H. Kadono, Dynamic speckle correlation method using liquid crystal TV panel for vibration analysis of light weight structure 89 (1992) 126
Zheng, S.H., M.A. Karim and M.L. Gao, Amplitude-modulated phase-only filter performance in presence of noise 89 (1992) 296
Zhu, Y., Line splitting and modified atomic decay of atoms coupled with N quantized cavity modes 89 (1992) 217

Optics Communications 89 (1992) 516–520
North-Holland

OPTICS
COMMUNICATIONS

Subject Index to Volume 89

Propagation and transmission in homogeneous media

Properties of bi-isotropic Fresnel reflection coefficients, A. Sihvola and I. Lindell 89 (1992) 1
Spatial and temporal transformation of femtosecond laser pulses by lenses with annular aperture, M. Kempe, U. Stamm and B. Wilhelmi 89 (1992) 119
Dynamic speckle correlation method using liquid crystal TV panel for vibration analysis of light weight structure, Q. Zhang, S. Toyooka and H. Kadono 89 (1992) 126
Homogeneous refracting waveguide lenses – stigmatism and aplanatism, Z. Nikolov and B. Pantchev 89 (1992) 131
Michelson interferometric detection for optoacoustic spectroscopy, J.H. Chu, Y.H. Bak, B.K. Kang, U. Kim, K.W. Oum, J.G. Choi and D.S. Ko 89 (1992) 135
Breaking the standard quantum limit for interferometric measurements, A. Luis and L.L. Sánchez-Soto 89 (1992) 140
Defocusing effects of a picosecond terawatt laser pulse in an underdense plasma, T. Auguste, P. Monot, L.-A. Lompré, G. Mainfray and C. Manus 89 (1992) 145
Multiple scattering of two light beams from a random rough surface, M. Nieto-Vesperinas, T. Michel, A.A. Maradudin and E.R. Mendez 89 (1992) 149
A compound interferometer for angle measurement, S.K. Sarkar, A. Basuray and K. Sengupta 89 (1992) 153
Rotor spatial filter for analysis and synthesis of coherent fields, V.V. Kotlyar and V.A. Soifer 89 (1992) 159
Theory of Mie resonances and ripple fluctuations, L.G. Guimarães and H.M. Nussenzveig 89 (1992) 363
Evaluation of the autocorrelation function from measurement of factorial moments, M.P. Cagigal 89 (1992) 370

Propagation and transmission in inhomogeneous media

Observation of the improvement of image quality under active illumination through turbulence, V.A. Myakinin 89 (1992) 164

Optical information, image formation and analysis, optical computing

TIR holography analyzed with coupled wave theory, P. Ehbets, H.P. Herzig and R. Dändliker 89 (1992) 5
Selective polarizing coding laser tomography for aerodynamics, J.P. Prenel and R. Porcar 89 (1992) 12
Double phase conjugate mirror and double colour pumped oscillator using band-edge photorefractivity in InP:Fe, N. Wolffer, P. Gravey, G. Picoli and V. Vieux 89 (1992) 17
Color classification by vector subspace method and its optical implementation using liquid crystal spatial light modulator, T. Jaaskelainen, S. Toyooka, S. Izawa and H. Kadono 89 (1992) 23
The least-squares discriminant function, P. Vermeulen and E. Barnard 89 (1992) 73

Spatial and temporal transformation of femtosecond laser pulses by lenses with annular aperture, M. Kempe, U. Stamm and B. Wilhelmi 89 (1992) 119
Observation of the improvement of image quality under active illumination through turbulence, V.A. Myakinin 89 (1992) 164
Array illuminators and complexity theory, A.W. Lohmann 89 (1992) 167
Form birefringence of surface relief gratings and its angular dependence, E. Gluch, H. Haidner, P. Kipfer, J.T. Sheridan and N. Streibl 89 (1992) 173
Organization of information flow in computation for efficient utilization of high information flux communication media, H.M. Ozaktas and J.W. Goodman 89 (1992) 178
Optical quadratic associative memory with translation and scale invariance, G.G. Yang and P. Healey 89 (1992) 183
Amplitude-modulated phase-only filter performance in presence of noise, S.H. Zheng, M.A. Karim and M.L. Gao 89 (1992) 296
Aspheric holographic elements for far IR radiation, E. Hasman, N. Davidson and A.A. Friesem 89 (1992) 306
Extended-object reconstruction with sequential use of the iterative blind deconvolution method, N. Miura and N. Baba 89 (1992) 375
Thresholding of two facing double phase conjugate mirror and semilinear phase conjugate mirror with fanning in BTO, N. Wolffer, Ph. Gravey and V. Royer 89 (1992) 380

Optical communications

Optimum placement of filters in 1300 nm Nd-fibre amplifiers, O. Lumholt, M. Øbro, A. Bjarklev, T. Rasmussen, B. Pedersen, J.E. Pedersen, J.H. Povlsen and K. Rottwitt 89 (1992) 30
Structure induced crosstalk in fibre-optic lattice point sensor arrays, J. Capmany 89 (1992) 33
Homogeneous refracting waveguide lenses – stigmatism and aplanatism, Z. Nikolov and B. Pantchev 89 (1992) 131
On the puzzle of the phase of second-harmonic generation at a self-organized $\chi^{(2)}$ grating in optical fibers, P. Chmela 89 (1992) 189
Focal shift for a gaussian beam by an aperture written in terms of matrix optics, X. Lu, S. Wang and L. Ronchi 89 (1992) 195
Polarization mode dispersion: time versus frequency domains, N. Gisin and J.P. Pellaux 89 (1992) 316
Strong coupling in grating-assisted multiwaveguide systems, M. Florjańczyk and R. Tremblay 89 (1992) 385
New kinds of periodical waves in birefringent optical fibers, N.A. Kostov and I.M. Uzunov 89 (1992) 389
Analytical description of the optical field in a circular fibre array with Kerr-law nonlinearity, C. Schmidt-Hattenberger, U. Trutschel, R. Muschall and F. Lederer 89 (1992) 473

Atomic and molecular physics

Reduction of the second-order Doppler broadening in two-photon atomic beam spectroscopy: a proposal, P. Juncar and M. Himbert 89 (1992) 199
Three-dimensional velocity-selective coherent population trapping of (3+3)-level atom, M.A. Ol'shaniĭ and V.G. Minogin 89 (1992) 393

Condensed matter

Double phase conjugate mirror and double colour pumped oscillator using band-edge photorefractivity in InP:Fe, N. Wolffer, P. Gravey, G. Picoli and V. Vieux 89 (1992) 17
Maximum entropy model in reflection spectra analysis, E.M. Vartiainen, K.-E. Peiponen and T. Asakura 89 (1992) 37
Characterization of the nonlinear crystal meta-nitroaniline (m-NA), G.-F. Huang, J.T. Lin, G. Su, R. Jiang and S. Xie 89 (1992) 205
A new guest–host system: towards stable second-order optical nonlinearity, R.J. Jeng, Y.M. Chen, A.K. Jain, S.K. Tripathy and J. Kumar 89 (1992) 212
Towards a hyperfine measure of noble metals "image" surface states, E. Ilisca 89 (1992) 399
Laser-induced grating spectroscopy of electron–phonon interaction in metallic and high-temperature superconductors, B. Fainberg 89 (1992) 403
Characterization of interfacial index gradients by spectroscopic ellipsometry at variable angle of incidence, J. Rivory, J.-M. Frigerio and C. Marques 89 (1992) 482

Plasmas

Defocusing effects of a picosecond terawatt laser pulse in an underdense plasma, T. Auguste, P. Monot, L.-A. Lompré, G. Mainfray and C. Manus 89 (1992) 145
Energy transport in plasmas produced by a high brightness KrF Raman laser, G.J. Tallents, M.H. Key, P. Norreys, J. Jacoby, R. Kodama, H. Baldis, J. Dunn and D. Brown 89 (1992) 410

Lasers

Passive and self-Q-switching of phase-conjugation Nd:YAG laser oscillators, A. Agnesi and G.C. Reali 89 (1992) 41
Deviation from Lorentz-type dynamics of an NH_3 ring laser, D.Y. Tang, C.O. Weiss, E. Roldán and G.J. de Valcárcel 89 (1992) 47
Self-frequency-doubled high Δn proton exchange Nd:$LiNbO_3$ waveguide laser, Q. He, M.P. De Micheli, D.B. Ostrowsky, E. Lallier, J.P. Pocholle, M. Papuchon, F. Armani, D. Delacourt, C. Grezes-Besset and E. Pelletier 89 (1992) 54
A compact, high-power, fast start-up manganese bromide laser (λ 534–554 nm, 1.29–1.40 μm), D.R. Jones and C.E. Little 89 (1992) 80
Defocusing effects of a picosecond terawatt laser pulse in an underdense plasma, T. Auguste, P. Monot, L.-A. Lompré, G. Mainfray and C. Manus 89 (1992) 145
Line splitting and modified atomic decay of atoms coupled with N quantized cavity modes, Y. Zhu 89 (1992) 217
Improvements to the diagnostics of beam quality in cw and pulsed laser systems, A. Cutolo and L. Zeni 89 (1992) 223
The stability of a laser amplifier module with flat electrodes to parasitic oscillation, K.A. Nasyrov and V.N. Snytnikov 89 (1992) 229
Generation of far-infrared laser pulses in CH_3I gas by stimulated Raman scattering resonantly enhanced at fundamental and overtone transitions, P.T. Lang, W. Schatz, T. Kass, A.D. Semenov and K.F. Renk 89 (1992) 233
Self-stabilization of a hybridly mode-locked styryl-9 dye laser using coherent photon seeding, J.Q. Bi, W. Hodel and H.P. Weber 89 (1992) 240
Bulk GaAlAs mirror as a saturable absorber for subpicosecond pulse generation around

835 nm, J.Q. Bi, W. Hodel, P. Beaud, J. Schütz, H.P. Weber, M. Proctor, M.A. Dupertuis, D. Martin, F. Morier-Genoud and F.K. Reinhart 89 (1992) 245
Improved performance of an NH_3 laser by temporal shaping of a CO_2 laser pulse, D.J. Biswas, S.K. Sarkar and A.K. Nayak 89 (1992) 249
Laser diode coupled to a single-delay external Kerr cavity, P. Peterson, M.P. Sharma and A. Gavrielides 89 (1992) 253
Compression of cw passively additive-pulse mode-locked Nd:YLF laser pulses, J.K. Chee and J.M. Liu 89 (1992) 414
Annular slot array output couplers for submillimetre lasers, M.D. Bowden, B.W. James, I.S. Falconer, D.H. Dawes, P.A. Krug, J.C. Macfarlane, W. Wright and L.B. Whitbourn 89 (1992) 419
Lateral and transverse mode properties of CO_2 slab waveguide lasers, C.J. Shackleton, K.M. Abramski, H.J. Baker and D.R. Hall 89 (1992) 423
A tail free, efficient, high power, ns CO_2 laser, S. Marchetti and R. Simili 89 (1992) 429
Cavity configurations for copper vapour laser pumped titanium sapphire lasers, M.R.H. Knowles and C.E. Webb 89 (1992) 493

Nonlinear optics

Passive and self-Q-switching of phase-conjugation Nd:YAG laser oscillators, A. Agnesi and G.C. Reali 89 (1992) 41
Self-frequency-doubled high Δn proton exchange Nd:$LiNbO_3$ waveguide laser, Q. He, M.P. De Micheli, D.B. Ostrowsky, E. Lallier, J.P. Pocholle, M. Papuchon, F. Armani, D. Delacourt, C. Grezes-Besset and E. Pelletier 89 (1992) 54
Studies on the formation of self-pumped phase conjugation in Cu-doped KNSBN crystal, X. Yue, Z. Shao, X. Lu, Y. Song and H. Chen 89 (1992) 59
Bandwidth and beam quality of barium borate parametric oscillator sinchronously pumped by an active passive modelocked Nd:YAG laser, G.P. Banfi, M. Ghigliazza and P. Di Trapani 89 (1992) 63
Solution to four-wave mixing in the reflection geometry utilising the SU(1,1) group symmetry, A.K. Powell, D.A. Fish and T.J. Hall 89 (1992) 68
Photorefractive wave mixing with finite beams, W. Królikowski and M. Cronin-Golomb 89 (1992) 88
Characterization of non ideal quantum non-demolition measurements, P. Grangier 89 (1992) 99
Degenerate four-wave mixing in Kerr media in the presence on nonlinear refraction, pump depletion and linear absorption, S. Guha and P. Conner 89 (1992) 107
Laser diode coupled to a single-delay external Kerr cavity, P. Peterson, M.P. Sharma and A. Gavrielides 89 (1992) 253
Reflectivity enhancement of stimulated Brillouin scattering liquids by purification, H.J. Eichler, R. Menzel, R. Sander and B. Smandek 89 (1992) 260
Two-wave coupling and self-pumped phase conjugation of SBN:Ce at near infrared wavelengths, H.Y. Zhang, X.H. He, Y.H. Shih and S.H. Tang 89 (1992) 263
Broadband stimulated Brillouin scattering, M.A. O'Key and M.R. Osborne 89 (1992) 269
Whole beam method for photorefractive nonlinear optics, M. Cronin-Golomb 89 (1992) 276
Observations of diffraction and self-diffraction effects during two-wave mixing in a nematic liquid crystal, D.J. Webb, S.J. Elston and L. Solymar 89 (1992) 283
Spontaneous optical pattern formation in a nematic liquid crystal with feedback mirror, R. Macdonald and H.J. Eichler 89 (1992) 289
Detection of optical squeezing and photon statistics in polaritons, M. Artoni and J.L. Birman 89 (1992) 324

Optical force on the Raman dark state in two standing waves, P.R. Hemmer, M.G. Prentiss, M.S. Shahriar and N.P. Bigelow 89 (1992) 335
Properties of a quantum light amplifier in a high-Q cavity, applied to a nondegenerate parametric oscillator, M. Berger and L. Knöll 89 (1992) 343
Evaluation of the autocorrelation function from measurement of factorial moments, M.P. Cagigal 89 (1992) 370
Thresholding of two facing double phase conjugate mirror and semilinear phase conjugate mirror with fanning in BTO, N. Wolffer, Ph. Gravey and V. Royer 89 (1992) 380
Laser-induced grating spectroscopy of electron–phonon interaction in metallic and high-temperature superconductors, B. Fainberg 89 (1992) 403
Frequency domain phase measurement of ultrashort light pulses. Effect of noise, J.L.A. Chilla and O.E. Martinez 89 (1992) 434
Suppression of the medium excitation in resonant nonlinear optics, R. Frey 89 (1992) 441
The SU(2) dynamics of DFWM, G.R. Barrett, A.K. Powell and T.J. Hall 89 (1992) 447
Hamiltonian description of optical pulse propagation in unbounded Kerr media, B. Crosignani and P. Di Porto 89 (1992) 453
Induced self-pumping phase-conjugation with $BaTiO_3$, H.-F. Yau, Y.-P. Tong, C.-C. Chang and N.-C. Wang 89 (1992) 457
Steady-state pulse propagation in an amplifying medium embedded in a dispersive and nonlinear Kerr host, S. Chi and T.-Y. Wang 89 (1992) 463
Chirped pulse coherent amplification with full extraction of active medium energy, E.M. Belenov, P.G. Kryukov, A.V. Nazarkin and I.P. Prokopovich 89 (1992) 468
Analytical description of the optical field in a circular fibre array with Kerr-law nonlinearity, C. Schmidt-Hattenberger, U. Trutschel, R. Muschall and F. Lederer 89 (1992) 473

X-ray optics and applications

Coupled-wave description of the diffraction by zone plates with high aspect ratios, J. Maser and G. Schmahl 89 (1992) 355